

## **Retainer for Balls**

Cross Reference to Related Applications (none)

Statement Regarding Fed Sponsored R & D (none)

### **Background of the Invention**

The proposed invention generally relates to sports equipment storage devices, more specifically to a simplified ball holder of one continuously contoured structure to accept a nested storage of a variety of ball shapes and sizes while providing means for attachment to walls or poles.

Storing a wide assortment of basketballs, soccer balls, kickballs, volley balls and the like is often problematic. Round balls tend to roll aimlessly about closets, garages and play areas when unattended or restrained from movement and, therefore, readily become a hazard rolling about the floor area. Also during practice sessions, often more than one ball are required for different drill sessions. The ball holder readily can supply more than ball because the balls are nested in one holder. During regulation games it often happens that a badly thrown or kicked ball may end up in the audience, never to be seen again. The ball holder readily supplies another ball to be put into play.

Previous ball holding devices may dedicate themselves to store a limited variety of balls by including features to contain and secure specific sizes and shapes of particular balls. Some storage devices become excessively large and bulky while attempting to accommodate additional storage features for related sports equipment other than balls. Previous devices often limit their attachment to flat surfaces such as household walls, without concern for other forms of attachment. also previous devices may include multiple piece parts that often defeat simplicity and are difficult to clean and include protruding features that may cause accidental injury to the unwary.

US Patent No. 6,454,105 describes a ball bracket of multiple pieces, namely, a flat mounting plate and protruding tongs to surround and secure a specific sized ball. With the device dedicated to clinch and secure one specific sized ball. Another ball size might require alteration and adjustment of the device for acceptance of a different ball. The device includes a flat, rigid mounting plate sufficient for attachment to a flat vertical surface. This disclosed device has no specific features for adapting to a rounded surface such as a round pole.

US Patent No. 5,203,462 describes a sport equipment rack for multiple balls and related sport activities. This device does not offer the simplicity and limited size for holding a single ball and is intended as a wall mounted station for assorted equipment.

US Patent No. 5,355,795 Describes a sport equipment support rack that likewise includes additional features dedicated to items other balls while becoming a larger utilitarian device requiring increased space for the intended mounting to a wall. This device lacks simplicity and becomes cumbersome while using unnecessary space.

US Patent No. 5,813,550 describes a storage rack of threaded pegs secured to a wall mounting plate. this invention does not address the function of storing variously sized balls.

### **Brief Summary of the Invention**

The ball holder or retainer of the present invention has specific design features which distinguishes it from prior devices. These features allow for the use of the ball holder to nest variously sized balls without required bracket adjustment. Further, the device limited space, is easy to clean and does not include any protruding parts to threaten accidental injury and likewise may be made from flexible material to accept incidental impact.

The rod of the invention can be made of metal that can easily be bent or from a plastic material that can be formed under heat or the ball retainer can be formed by injection molding. The device includes features to provide for mounting to conventional poles as well as flat surfaces. Further, the device is convenient, simple and inexpensive. The present invention provides a ball retainer for holding various sizes and shapes of sports related balls. The retainer includes a single piece member or rod that contours to form nesting support for random sized balls and provides means for supporting the device to either a flat or a curved surface.

### **Brief Description of the Drawings**

Fig. 1 is side view of the ball retainer;

Fig. 2 is a front view of the ball retainer;

Fig. 3 shows a perspective view of a way of mounting the ball retainer on a round pole;

Figs. 4 and 5 show a belt by which the ball retainer is mounted on a round pole;

Fig. 6 illustrates a cleated adjustment belt.

### **Detailed Description of the Invention**

Figs. 1 and 2 illustrate a side and a front view of the inventive ball retainer. It is a very simple construction consisting of a single rod 1 that is bent upon itself to form a U-shaped bend or form of a half circle 2 to thereby form parallel double legs and the double legs are once more bent upon themselves to form another substantially circular bend or U-shaped form as shown at 3. The two end legs are fastened to a mounting plate 6 which has holes 4 and 5 therein so that the plate can be fastened to any desirable location. It should be noted, when studying Figs. 1 and 2, the first U-shaped bend is turned by 90° from the second U-shaped form.

Fig. 3 is a perspective view as the ball retainer is fastened to a pole P. The same reference characters are applied as were in Figs. 1 and 2. The plate 6 has a center piece (not shown) through which is threaded a mounting strap 7 having an adjustment buckle 8. This strap and buckle is similar in construction as the well known hose clamp. In this arrangement, the mounting holes 4 and 5 may be omitted because the strap, when tightened, is sufficient to rigidly hold the ball retainer in place.

Figs. 4 and 5 show the ends of the rod 1 positioned in a different mounting plate or block. There are shown the mounting straps or belts similar to the ones shown in Fig. 3. However, the mounting plate 6 of Fig. 3 is formed into a contoured block having bosses 11 at each side edge. In this way, a contoured mounting block is formed that has an inner curvature 15 so designed to hug the outer round surface of a pole. Fig. 5 again shows the mounting holes 4 and 5 which, again, may be omitted.

Fig. 4 shows different and elongated mounting holes 12 and 13 which simply allow for a different technique for mounting the ball retainer on a pole.

Fig. 6 shows an entirely different way of mounting the ball retainer on a substantially round pole. In this construction, there is rigid mounting plate 25 which receives the two ends of 1 of the rod 1. At each side of the mounting plate 25, there are formed two elongated receiving openings or slots 24. Beyond the two receiving slots there are each a cutaway 20 for the purpose of separating the cleated belt 21 from the mounting plate 25 by way of a tear or separating line 20a. The belt itself has a multiple and evenly spaced round cleats 22 thereon. This type of operates in the following manner. Once a location of a round pole or even a tree has been determined, one side of the belt next to the mounting plate 25 is separated from the mounting plate 25 by way of the cut-away 20 and the tear line 20a. The free end of the belt can now be wrapped around the pole until tight and one of the flat areas 23

between the cleats 22 is slipped into the elongated slot 24 to be held therein. This type of belt makes for a quick and secure adjustment of the ball retainer on differently sized poles.

**What I claim is:**